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CP1406 Week 2 Practical – Creating a Webpage Template Document

In this practical, you will create a webpage template. You will create an HTML document with the HTML elements that define the webpage structure. You will then use the template created to produce basic home pages for a fitness club and the Training Zone website that you planned in the week 1 practical. Use Visual Studio Code or your preferred text editor to create the HTML files.

For today's practical, you need to submit:
- A single zip file containing two (2) folders:
  - Fitness folder which contains
    - the fitness webpage template
    - a home page for the "Forward Fitness Club" website (index.html)
  - Training Zone folder which contains:
    - a home page for the "Training Zone" website (index.html)

Part 1 – Creating a Webpage Template Document

In the upcoming practicals, we will create simple webpages for a company, Forward Fitness Club. The following steps create a basic webpage template:

- In the "CP1406" or "CP5638" folder that you created for the week 1 practical, create a subfolder called "**fitness**".
- Open your editor, click **File** on the menu bar, and then click **New**.
- Click **File** on the menu bar and then click **Save As** to display the Save As dialogue box.
- Navigate to your **fitness** folder and then double-click it to open it.
- In the File name box, type "**template.html**" to name the file.
- Click the **Save as type** button and then tap or click HTML (Hyper Text Markup Language) to select the file format.
- Click the **Save** button to save the template in the **fitness** folder.
- On Line 1 of the editor, type `<!doctype html>` to define a new HTML 5 document (Figure 1).

Figure 1

- Press the enter key to add Line 2 and then type `<html lang="en">` to add a starting <html> tag that defines the language as English.
- Press the enter key to add Line 3 and then type `<head>` to add a starting <head> tag (Figure 2).

Figure 2

- Add the following HTML elements, also shown in Figure 3.

```
        <title></title>
        <meta charset="utf-8">
</head>
<body>
</body>
</html>
```

- Save your changes.

Figure 3

Part 2 – Adding HTML 5 Semantic Elements to a Webpage Template

We will now define content areas, insert the following HTML 5 elements between the <body> and </body> tags: <header> </header>, <nav> </nav>, <main> </main>, and <footer> </footer>.
Recall that the HTML 5   header   element defines the header area of the webpage.
The   nav   element defines the navigation area of the webpage.

The **main** element defines the primary content area of the webpage.
The **footer** element defines the footer area of the webpage.
The following steps insert HTML 5 structural elements within the body tags.

- Between the <body> tag, add a starting header tag **<header>**. Then type **</header>** to add an ending header tag (Figure 4).
- Add the following HTML 5 tags to complete the wireframe, indenting each line and inserting a blank line after each ending tag (Figure 4). Then save your changes.

```
<nav>
</nav>

<main>
</main>

<footer>
</footer>
```
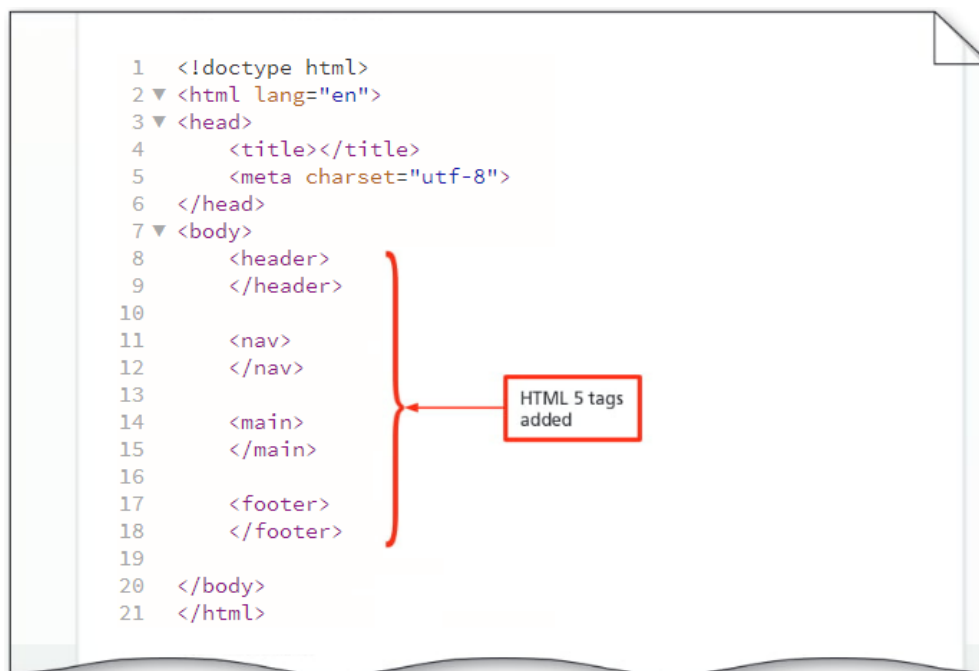

Figure 4

Part 3 – Adding HTML 5 Semantic Elements to a Webpage Template

Recall that when a webpage is displayed in a browser, the browser tab displays the document title. To add a document title, type the title text between the starting and ending title tags. The following step adds a webpage title to a template.

- Place your insertion point after the beginning <title> tag and type "**Forward Fitness Club**" to add a webpage title.

<title>Forward Fitness Clube</title>

- Save your changes and then view the page in a browser to display the webpage title (Figure 5)
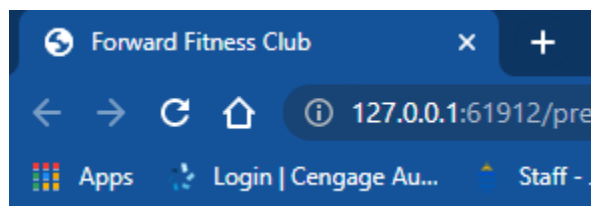

Figure 5

Part 4 - Adding Comments to a Webpage Template

When you create a webpage template, including comments provides additional information about how to use the sections of the webpage. You can also use a comment to identify that you are the author of the webpage. When creating a new webpage from a template, comments provide insight on the type of information to include.
The following steps add comments to a webpage template.

- Create a new line right under the <!DOCTYPE html> tag. On the new line, type
  <!-- This website template was created by: Student's First Name Student's Last Name -->
  to add a comment at the beginning of the document that identifies you as the author (Figure 6).

- Create a new line right under the <body> tag. On the new line, type
  <!-- Use the header area for the website name or logo -->
  to add a comment identifying the type of information to include in the header area (Figure 6).

Figure 6

Part 5 - Adding Content to the Header Section

Now that the webpage template structure is complete, you can add static content that will appear on each webpage within the website. The header of each webpage in the fitness website should display the name of the business, Forward Fitness Club. For now, you enter the business name as text. The following step adds content to the header area of a webpage template.

- Place the insertion point after the beginning <header> tag and press the enter key to insert a new Line.
- On the new line, press the tab key and then type
    <h1>Forward Fitness Club</h1>
  to add the business name to the webpage template (Figure 7).

```
<body>
    <!-- Use the header area for the website name or logo -->
    <header>
        <h1>Forward Fitness Club</h1>
    </header>

    <nav>
    </nav>
```

Figure 7

Part 6 – Adding Text and Nonbreaking Spaces to the Nav Section

- Place the insertion point after the beginning <nav> tag and press the enter key to insert a new line.
- Indent if you need to (press the tab key) and then type
    <p>Home
  to add the first webpage link name.
- Press the spacebar once and then type
      ┃
  to add a nonbreaking space, a vertical line, and another nonbreaking space (Figure 8).
- Press the enter key to insert a new line.
- On the new line, type About Us to add the second webpage link name.
- Press the SPACEBAR once and then type
      ┃
  to add a nonbreaking space, a vertical line, and another nonbreaking space (Figure 8).
- Press the enter key to insert a new line, type Classes to add the third webpage link name, press the SPACEBAR, and then type
      ┃
  to add a nonbreaking space, a vertical line, and another nonbreaking space (Figure 8).

- Press the enter key to insert a new line, type Nutrition to add the fourth webpage link name, press the SPACEBAR, and then type

    ┃

  to add a nonbreaking space, a vertical line, and another nonbreaking space (Figure 8).
- Press the enter key to insert a new line, and then type

  Contact Us</p>

  to add the fifth webpage link name (Figure 8).
- Save your changes.

```
1    <!doctype html>
2    <!-- This website template was created by: Student's First Name
         Student's Last Name -->
3  ▼ <html lang="en">
4  ▼ <head>
5        <title>Forward Fitness Club</title>
6        <meta charset="utf-8">
7    </head>
8  ▼ <body>
9        <!-- Use the header area for the website name or logo -->
10 ▼     <header>
11           <h1>Forward Fitness Club</h1>
12       </header>
13
14 ▼     <nav>
15 ▼         <p>Home   &#9475;  
16           About Us   &#9475;  
17           Classes   &#9475;  
18           Nutrition   &#9475;  
19           Contact Us</p>
20       </nav>
21
22       <main>
23       </main>
24
25 ▼     <footer><br>
26           <p>&copy; Copyright 2021. All Rights Resrved. </p>
27           <p>forwardfitness@club.net</p>
28       </footer>
29
30   </body>
31   </html>
```

Figure 8

Part 7 – Adding Content and a Symbol to the Footer Section

When adding content to a webpage, you often need to insert symbols or characters, such as a copyright symbol, ©. You can use either an entity's name or number in your HTML code for a character you wish to insert to your webpage. An entity name is easier to remember than an entity number, though more browsers support entity numbers than names. Some common symbols can be seen in Table 1 below.

Character	Description	Entity Name	Entity Number
©	Copyright symbol	©	©
®	Registered trademark	®	®
€	Euro	€	€
&	Ampersand	&	&
<	Less than	<	<
>	Greater than	>	>
	Nonbreaking space		

Table 1

- Create a new line right under the <footer> tag. On the new line, type
  <p>© Copyright 2022. All Rights Reserved.</p>
  to add a paragraph element with the copyright symbol and additional copyright information (Figure 9)
- Press the enter key to insert a new line and then type
  <p>forwardfitness@club.net</p>
  to add a paragraph element with an email address to the footer section (Figure 9).

```
<footer><br>
    <p>&copy; Copyright 2021. All Rights Resrved. </p>
    <p>forwardfitness@club.net</p>
</footer>
```

Figure 9

Part 8 – Validating the Webpage Template

Before you use the webpage template to create the necessary webpages for the fitness website, run the template through the W3C validator to check the document for errors. If the document has any errors, validating gives you a chance to identify and correct them before using the template to create a webpage. The following steps validate an HTML document.

- Open your browser and type https://validator.w3.org/ in the address bar to display the W3C Markup Validation Service page.
- Click the Validate by File Upload tab to display the Validate by File Upload information.
- Click the Choose File button to display the Open dialog box.
- Navigate to your fitness folder to find the template.html file (Figure 10).
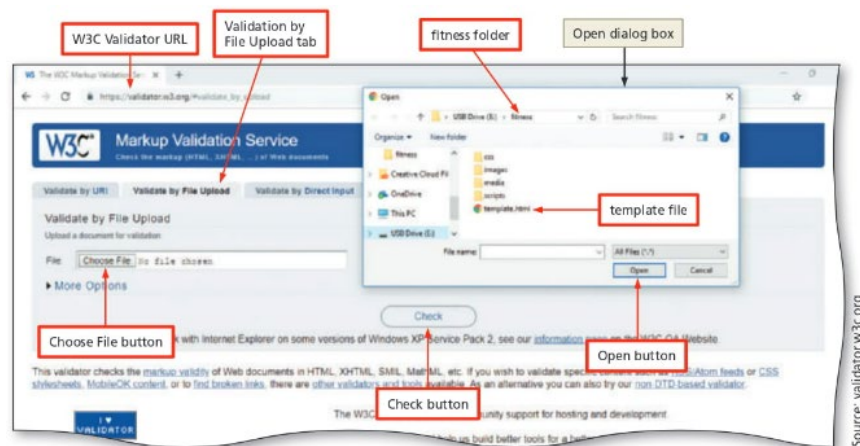
Figure 10

- Tap or click the template.html document to select it.
- Tap or click the Open button to upload the selected file to the W3C validator.
- Tap or click the Check button to send the document through the validator and display the validation results page (Figure 11).
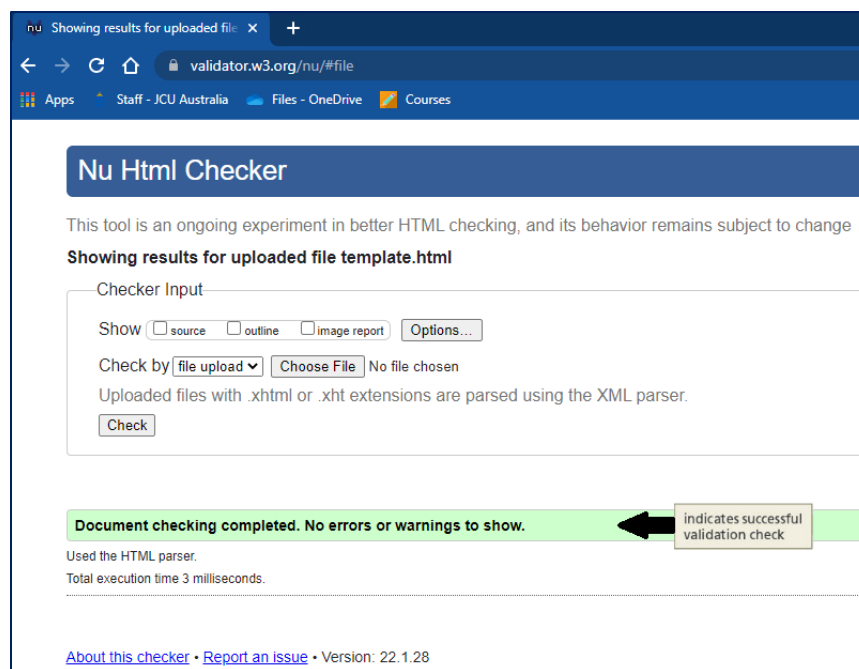

Figure 11

Part 9 – Validating an HTML Document with Errors

If the webpage template was created successfully, you should not receive any errors, but you can review what the validator provides when a document with errors is uploaded to the validator. Why? When errors are detected on a webpage, the validator provides information about the location of the

error so you can identify and correct them. The following steps insert an error in the template document and then validate the document with the W3C validator.

- Return to the template document in your text editor and delete html on line 1 to remove "html" from the DOCTYPE declaration.
- Save your changes and then return to the W3C Markup Validation Service page in your browser to display the W3C validator.
- If necessary, click the **Validate by File Upload** tab to display the Validate by File Upload information.
- Click the **Choose File** button to display the Open dialogue box.
- Navigate to the fitness folder, select the **template.html file**, and then click the **Open** button to upload the file.
- Click the **Check** button to run the template file through the validator.
- Scroll down to display the error messages (Figure 12).
- Scroll down to display the validation errors.
- Review the errors and note the line numbers of the errors in the document (Figure 12).
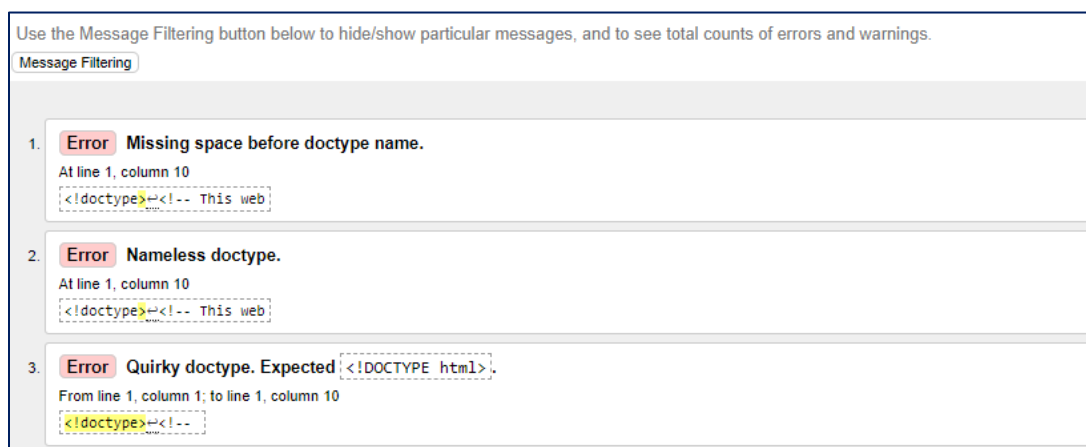

Figure 12

Part 10 – Creating a Home Page Using a Webpage Template and Adding Content

Create the Forward Fitness Club home page by opening the webpage template and then saving the page with a new name in the root fitness folder. Why? Using a template saves time in coding because the basic wireframe for the page is already established in the template. As a document for one of the main pages of the site, the home page belongs in the root folder. You use the fitness template to create all the webpages for the website. The following steps create the home page for the fitness website using the webpage template.

- Tap or click File on the menu bar and then tap or click **Save As** to display the Save As dialogue box.

- In the File name text box, type **index.html** to name the file.
- Click the **Save** button to save the file in the fitness folder.
- Place your insertion point after the beginning <main> tag and press the enter key twice to insert two new lines.
- On the second new line, press the **tab** key and then type

  <p>Welcome to Forward Fitness Club. Our mission is to help our clients meet their fitness and nutrition goals. </p>

  to add paragraph tags and content to the page (Figure 13).
- Press the enter key two times to insert two new lines, and then type

  <p>If you have struggled with getting healthy and need the motivation and resources to make a healthy lifestyle change, contact us today. Our facility includes state-of-the-art equipment, convenient group training classes, and nutrition tips and information to keep you healthy.</p>

  on the first new line to add a second paragraph to the page.
- Press the enter key two times to insert two new lines and then type

  <p>We provide a FREE one-week membership so you can experience the benefits of our equipment and facility. This one-week trial gives you complete access to our equipment, training classes, and nutrition planning. Contact us today to start your free trial!</p>

  on the first new line to add a third paragraph to the page (Figure 13).
- Press the **ENTER** key to insert a new blank line above the ending </main> tag.
- Check the spelling of your document and save your changes.

```
</nav>

<main>

    <p>Welcome to Forward Fitness Club.  Our mission is to help our
    clients meet their fitness and nutrition goals.</p>

    <p>If you have struggled with getting healthy and
        need the motivation and resources to make a healthy
        lifestyle change, contact us today. Our facility
        includes state-of-the-art equipment, convenient group
        training classes, and nutrition tips and information
        to keep you healthy.</p>

    <p>We provide a FREE one-week membership so you can experience
        the benefits of our  equipment and facility. This one-week
        trial gives you complete access to our  equipment, training
        classes, and nutrition planning. Contact us today to start
        your free trial!</p>

</main>
```

Figure 13

Part 11 – Creating the Training Zone home page

Now that you have some experience creating a home page for the Forward Fitness Club website, you will now create the Training Zone home page. Please refer to your week 1 practical for the site goal, target audience, colour, graphic, and accessibility, as well as the sitemap.

- In the "CP1406" or "CP5638" folder that you created for the week 1 practical, create a subfolder called "**Training Zone**".

- Double-click the **Training Zone** folder to open it.
- Inside the Training Zone folder, create folders called **css** and **images**.
- Refer to the Training Zone information from the week 1 prac for its web content.
- From your webpage template created, you can use it to build the Training Zone home page.
- For the Training Zone home page, name it "index.html", and save it to the Training Zone folder.

Deliverables:

- A single zip file containing two (2) folders:
  - Fitness folder which contains
    - the fitness webpage template
    - a home page for the "Forward Fitness Club" website (index.html)
  - Training Zone folder which contains:
    - a home page for the "Training Zone" website (index.html)